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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,977	05/20/2004	George F. Fanta	0180.02	8630

25712 7590 12/13/2005

USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER
NATIONAL CTR FOR AGRICULTURAL UTILIZATION RESEARCH
1815 N. UNIVERSITY STREET
PEORIA, IL 61604

EXAMINER

BISSETT, MELANIE D

ART UNIT PAPER NUMBER

1711

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/849,977

Applicant(s)

FANTA ET AL.

Examiner

Melanie D. Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The rejections based on 35 USC 103 have been maintained for the reasons cited below. The double patenting rejections have been withdrawn based on the filing of the terminal disclaimer.

Terminal Disclaimer

2. The terminal disclaimer filed on 23 September 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,709,763 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fanta et al. ("Formation of Hydrophilic Starch Coatings on Polyethylene Films" from *Journal of Applied Polymer Science*) in view of Weaver et al. It is the examiner's position that the earliest effective filing date for the current application is 20 November 2002 since the parent US application does not support the graft copolymer limitations.

5. From a prior Office action:

Fanta discloses thin starch coatings for polyethylene film substrates, where the coatings are jet cooked solubilized starch solutions from waxy or high amylose cornstarch and are applied in amounts of 0.03-0.05 mg per cm² of substrate (abstract). Because the reference teaches the claimed application amounts, it is the examiner's position that the reference teaches the claimed thickness of about 1 micron or less. Coatings appear to

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have nodules (Figure 2). Also, because the reference teaches application of the coatings to polyethylene bags (p. 1783), it is the examiner's position that the reference suggests applying the coatings to a three-dimensional object.

Although the reference teaches hydrophobic substrates coated with solubilized starch coatings, Fanta does not disclose graft copolymers of solubilized starch. Weaver teaches starch-containing polymer compositions for absorbing water in diapers, surgical pads and sheets, and paper towels (abstract). Starch-polyacrylonitrile graft polymers are formed, where the starch used has been solubilized (col. 2 lines 44-49; col. 3 lines 43-51). The starch-polyacrylonitrile graft copolymers have improved water absorption (abstract). Thus, it is the examiner's position that it would have been prima facie obvious to use starch-polyacrylonitrile graft copolymers in the coatings of Fanta's invention to produce coatings of improved water absorption.

Response to Arguments

6. The applicant's argument that, to the extent that the publication teaches the claimed invention, Applicants have disclosed that invention in an earlier document. However, the MPEP is clear that claims in CIP applications not supported by the parent application receive the filing date of the CIP application. See MPEP 2133.01. In this case, the present claims are not supported in the original parent case but are supported in the CIP parent, which has a filing date of 20 November 2002. For this reason, the present claims receive an earliest filing date of 20 November 2002, regardless of what the cited reference teaches.

7. Regarding the declarations, the MPEP suggests that rejections using documents of different inventive entities may be overcome by a declaration under 37 CFR 1.132 by the *applicant* to establish that the article is describing his/her own work. An affidavit or declaration by applicant alone indicating that applicant is the sole inventor and that the others were merely working under his or her direction is sufficient to remove the publication as a reference under 35 U.S.C.

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102(a). See MPEP 715.01(c). It is the examiner's position that the declarations filed 23 September 2005 have not overcome the prior art since they do not establish that the publication describes the applicant's own work as signed by the applicants themselves.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett
Primary Examiner
Art Unit 1711

mdb